

(19) 世界知的所有権機関
国際事務局



(43) 国際公開日
2004 年 10 月 7 日 (07.10.2004)

PCT

(10) 国際公開番号
WO 2004/086515 A1

- (51) 国際特許分類⁷: H01L 31/02, G02B 5/28, H01L 27/14
- (21) 国際出願番号: PCT/JP2004/003993
- (22) 国際出願日: 2004 年 3 月 23 日 (23.03.2004)
- (25) 国際出願の言語: 日本語
- (26) 国際公開の言語: 日本語
- (30) 優先権データ:
特願2003-082589 2003 年 3 月 25 日 (25.03.2003) JP

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(81) 指定国 (表示のない限り、全ての種類の国内保護が可能): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NL, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

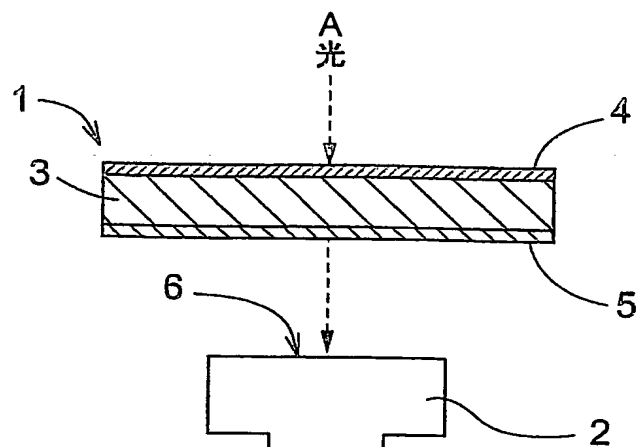
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添付公開書類:
— 国際調査報告書

[続葉有]

(54) Title: FILTER FUNCTION-EQUIPPED OPTICAL SENSOR AND FLAME SENSOR

(54) 発明の名称: フィルタ機能付き光センサ及び火炎センサ



A...LIGHT

(57) Abstract: A filter function-equipped optical sensor comprising a filter device (1) and a light receiving device (2), in order to provide a filter device capable of retaining stable optical characteristics over an extended period and an optical sensor using it, wherein a first interference filter structure (4) constituting the filter device (1) and consisting of a plurality of laminated light transmission layers is deposited on the surface of a color glass filter (3), and the light receiving device (2) is provided with a semiconductor light receiving element structure having a single or a plurality of semiconductor layers, with a single or a plurality of semiconductor layers in the semiconductor light receiving element structure being formed with light receiving areas and a single or a plurality of semiconductor layers involved in the formation of light receiving areas containing $\text{In}_x\text{Al}_y\text{Ga}_{1-x-y}\text{N}$ ($0 \leq x \leq 0.21$, $0 \leq y \leq 1$).

(57) 要約: 長期間にわたって安定した光学特性を保持することのできるフィルタ装置を提供し、それを用いた光センサを提供するため、フィルタ装置 (1) と受光装置 (2) とを備えてなるフィルタ機能付き光センサ

であって、フィルタ装置 (1) を構成する、複数の光透過層が積層されてなる第 1 干渉フィルタ構造 (4) が、色ガラスフィルタ (3) の表面上に堆積され、受光装置 (2) が、単数または複数の半導体層を有する半導体受光素子構造を備え、半導体受光素子構造中の単数または複数の半導体層に受光領域が形成され、受光領域の形成に係る単数または複数の半導体層が $\text{In}_x\text{Al}_y\text{Ga}_{1-x-y}\text{N}$ ($0 \leq x \leq 0.21$, $0 \leq y \leq 1$) を含む。

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/003993

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ H01L31/02, G02B5/28, H01L27/14

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ H01L31/00-31/0392, H01L31/08-31/119, G02B5/28,
H01L27/14-27/148

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1922-1996	Toroku Jitsuyo Shinan Koho	1994-2004
Kokai Jitsuyo Shinan Koho	1971-2004	Jitsuyo Shinan Toroku Koho	1996-2004

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	JP 2003-57111 A (Osaka Gas Co., Ltd.), 26 February, 2003 (26.02.03), Full text; all drawings (Family: none)	1, 3-8 2, 9
Y A	JP 2002-373977 A (Canon Inc.), 26 December, 2002 (26.12.02), Full text; all drawings (Family: none)	2 1, 3-9
Y A	JP 2000-183367 A (Osaka Gas Co., Ltd.), 30 June, 2000 (30.06.00), Full text; all drawings (Family: none)	9 1-8

☒ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

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Date of the actual completion of the international search

20 May, 2004 (20.05.04)

Date of mailing of the international search report

08 June, 2004 (08.06.04)

Name and mailing address of the ISA/

Japanese Patent Office

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/003993

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 11-153483 A (Osaka Gas Co., Ltd.), 08 June, 1999 (08.06.99), Full text; all drawings (Family: none)	1-9
A	JP 9-181350 A (Mitsubishi Cable Industries, Ltd.), 11 July, 1997 (11.07.97), Claims 1, 2 (Family: none)	1-9
A	JP 2000-147248 A (Canon Inc.), 26 May, 2000 (26.05.00), Claim 5 (Family: none)	3
A	JP 7-20313 A (Omron Corp.), 24 January, 1995 (24.01.95), Full text; all drawings (Family: none)	3